



INFOCOMMUNICATIONS AND INFORMATION TECHNOLOGY NATIONAL LABORATORY

TO EASE SAFELY THE EVERYDAY LIFE IN THE FUTURE

The members of the consortium setting up the Infocommunications and Information Technology National Laboratory have set themselves a dual objective, in line with relevant national strategies: to support the safe deployment and use of emerging ICTs; and to support the digital transformation of public administrations. As a result, the Laboratory will focus on research on the vulnerabilities of 5G and 6G technologies that will form the backbone of future communications, on specific aspects of cybersecurity, and on the deployment of artificial intelligence (AI)-based solutions in e-government and law enforcement.



MAIN RESEARCH AREAS

- 5G radio interface protocol testing
- 5G radio interface vulnerability
- Cyber defence related researches
- Secure communication channels
- AI-based eGovernment
- Administrative use of AI
- National data assets
- Development integration points based on AI technology

CONSORTIUM LEADER:

Special Service for National Security

CONSORTIUM PARTNER:

IdomSoft Zrt.

PROJECT NUMBER: 2022-2.1.1-NL-2022-00011

FUNDING PERIOD: 01.05.2022 - 31.03.2026

OVERALL BUDGET: 1.209.994.508 HUF



HUNGARIAN NATIONAL
LABORATORY



NATIONAL RESEARCH, DEVELOPMENT
AND INNOVATION OFFICE
HUNGARY

PROGRAM FINANCED
FROM THE NRDI FUND

BENEFITS TO BE EXPECTED FROM LABORATORY RESEARCH

A more secure deployment of 5G and next generation technologies can be implemented by mapping the threats and risks stemming from 5G technology, with special attention on the specificities of the used protocols and the vulnerabilities of the radio interface.

A more secure cyberspace can contribute to achieve the national digitisation objectives.

Developing applications can support the improvement and the operation of efficient communication channels, protocols through learning new cryptographic directions, technologies and methods.

Introducing AI-based solutions in the eGovernment, costumers are releaved to provide any data that is already available in the public administration, as well as there is no more need for organisational or administrative tasking that can be solved by internal procedures and/or communication among the relevant bodies.

Enabling touch-free, fully digitised and automated, secure and seamless public services to the citizens.

Enabling public services supported by AI language-tech solutions in order to fully address the specificities of the Hungarian language on the 21st century level.

Exploring the potential of the AI data analysis to protect the national data assets in order to avoid misuse of it, and to detect correlations and anomalies.

THE PROFESSIONAL TEAM

Dr. Csaba Kiss: Military vehicle operating engineer with a law degree, the Director General of Special Service for National Security.

Attila Németh: Telecommunications engineer with a law degree, defense control system designer, technical and support deputy of the director general of Special Service for National Security.

Lajos Szabó: degree in Computer Science, Director of the SSNS - National Cyber Security Center.

Gábor Komé: has almost twenty years of experience in the preparation, implementation and management of European Union and domestic funds projects, consortium project manager, head of department of SSNS's project office.

Péter Pál Orosz: telecommunications engineer, member of the SSNS research working group, operative professional manager.

Zsolt Bányai: Deputy CEO of Digital Solutions of IdomSoft Ltd., head of IdomSoft's technological renewal (scalable microservice architectures, container technologies). Manager of technology solutions for the State Application Development Platform.

Csongor Ádám: Chief Product Officer of IdomSoft Ltd., with significant experience in IT and Telecommunications industry, including the planning and implementation of large and complex projects involving IT infrastructure, application development, cloud computing, network infrastructure, e-government initiatives and system integration implementation. Member of the Blockchain Coalition.

Viktor Vass: Chief Technology Officer of IdomSoft Ltd. Experienced in corporate IT and supportive leadership of technology teams, resilient business informatics specialist with analytics and data warehouse specialization. Responsible for sustainable innovation in the field of technology, IT security and the State Application Development Environment (ÁAFK).

dr. Viktoria Zelena: Product strategy division manager at IdomSoft Ltd.. In addition to her experience in the UI / UX field, she is an expert in the design of public administration systems, the implementation of public administration processes, and the data protection implications of artificial intelligence technologies.

István Szviridov police lieutenant colonel: Head of the System Integration Division of the Law Enforcement Development Sector (LED) at IdomSoft Ltd. Manager of LED's developments as well as technological developments in artificial intelligence (text comprehension and interpretation, sound and image recognition).

Tibor Kellesy: innovation expert of IdomSoft Ltd., expert in 3D, VR and mixed reality artificial imaging and AI solutions. He has led several unique innovation processes and has significant international development experience, especially in connection with direct EU tenders.

POSSIBLE PARTNERSHIPS

Academic and industrial organizations with special competences and experience in the research areas of the National Laboratory. As well as the representatives of the National Laboratories, research centers and universities, as well as the industrial, law enforcement and secret services, public administration spheres, which can actively contribute to the results to be achieved in research and are able to utilize them.

TARGET GROUP

- Public administration institutions
- Law enforcement, defence and national security institutions
- Academic competence centres

PLACE OF IMPLEMENTATION:

- Budapest
- Nyíregyháza



CONSORTIUM PROJECT LEADER

GÁBOR KOMÉ

Consortium project manager, head of department of the SSNS's Project Office



kome.gabor@nbsz.gov.hu



+ 36 1 325 7672

CONTACT



infolab@nbsz.gov.hu



infolab.nemzetilabor.hu